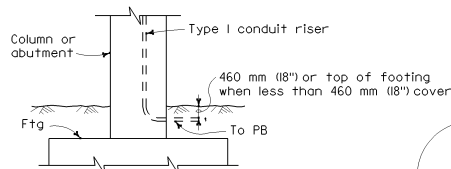
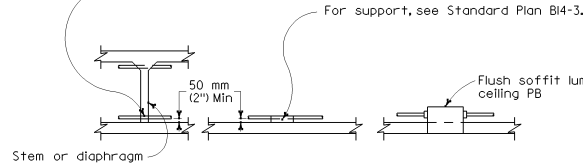


DETAIL R
CONDUIT RISER
CONNECTION

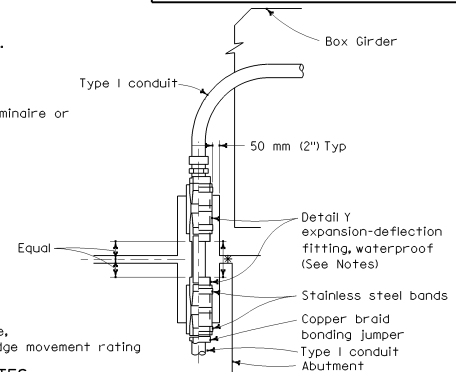


DETAIL T
LOWER END OF CONDUIT RISER
AT COLUMN OR ABUTMENT

Conduit passing through girder or diaphragm of box girder section shall be either cast into concrete or passed through opening. Opening shall not be drainage opening and shall be only as large as required to install conduit. Conduit shall be run either parallel to or at right angles to girders.



DETAIL S
CONDUIT INSTALLATION WITHIN
BOX GIRDER SECTIONS

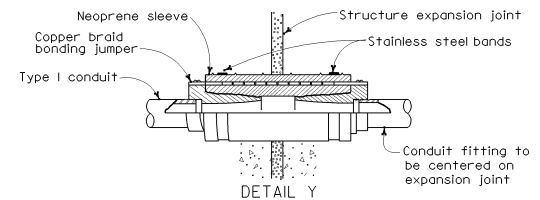


* Conduit nipple,
Length = Bridge movement rating

NOTES:

1. Fitting and pocket required only where movement can occur between girder and abutment.
2. Fill pocket around fitting with resilient waterproof compound.

DETAIL Y
CONDUIT RISER CONNECTION
AT COLUMN OR ABUTMENT



CONDUIT EXPANSION-DEFLECTION FITTING

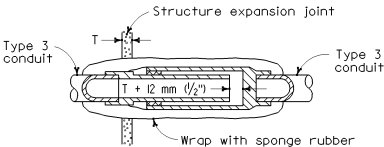
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
SIGNAL, LIGHTING AND
ELECTRICAL SYSTEMS
ELECTRICAL DETAILS
STRUCTURE INSTALLATIONS

These "Standard Plans for Construction of Local Streets and Roads" contain units in two systems of measurement: International System of Units (SI or "metric") and United States Standard Measures shown in the parentheses (). The measurements expressed in the two systems are not necessarily equal or interchangeable. See the "Foreword" at the beginning of this publication.

NO SCALE

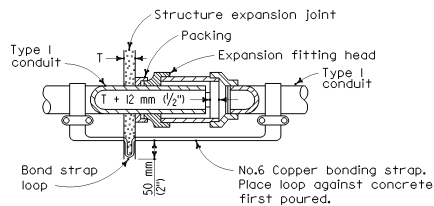
ES-9B

2002 DUAL UNITS STD PLAN ES-9B



NON-METALLIC CONDUIT INSTALLATION

(To be used only when shown or specified on Project Plans)

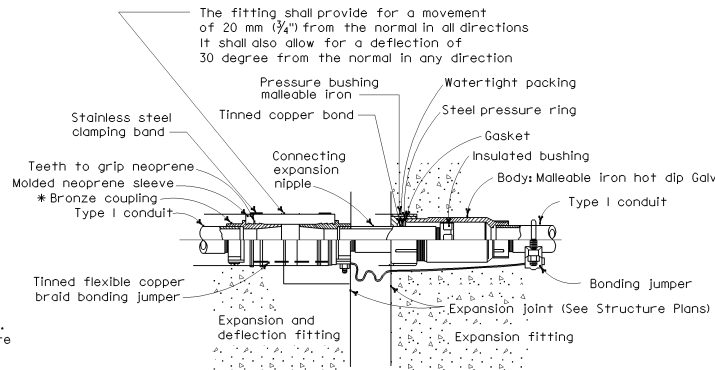


METALLIC CONDUIT INSTALLATION

DETAIL X
CONDUIT EXPANSION FITTINGS

NOTES:

1. Except for sidewalk joints, a conduit expansion fitting or expansion-deflection fitting shall be installed at each 12 mm (1/2") or greater structure joint, hinge or abutment.
2. Fittings or combination of fittings shall be installed to accommodate the movement rating as shown on the structure plans.
3. Fittings shall be installed parallel to superstructure girders.
4. Where lateral movement greater than 6 mm (1/4") may occur, a neoprene sleeve expansion-deflection fitting shall be installed straddling the joint.
5. The external bond strap may be omitted when the fitting is provided with an internal bond equivalent to a No.6 copper bond in Type I conduit or the No.8 equipment grounding conductor in Type 3 conduit.



DETAIL XY

COMBINATION EXPANSION-DEFLECTION FITTINGS

* Fittings shall be cast iron or hot dip Galv